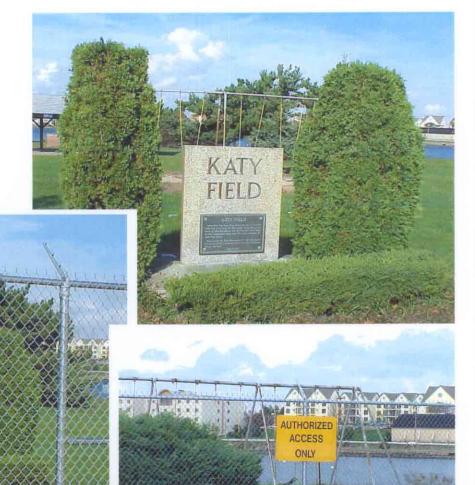
Katy Field



A Risk Communication Case Study



Prepared by: Navy Environmental Health Center



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EXECUTIVE SUMMARY

Katy Field, a small recreation site on Naval Station Newport, became the center of controversy for the Department of the Navy and the Environmental Protection Agency (EPA) Region I in the fall of 1998. This area, once used for fire fighter training, is an Installation Restoration (IR) Site.

Scientific studies and investigations, completed in 1994, indicated Katy Field was safe for *recreational use*. Both the EPA and the Rhode Island Department of Environmental Management reviewed and commented on the documents and no formal disagreements were raised concerning this conclusion. In the spring of 1998 two land use decisions for Katy Field, which seemed acceptable and safe to the Navy under the *recreational use* scenario, were interpreted as significant and potentially dangerous by the Environmental Protection Agency.

According to the Environmental Protection Agency, the Navy allowed for an increase in the use of Katy Field in the spring of 1998. They concluded this decision potentially increased the exposure of children to contaminated soil at the site and thereby increased the risk to their health and safety. In the fall of 1998, extensive local media coverage overstated the disagreements between the Navy and the Environmental Protection Agency over Katy Field and ignited unnecessary fear within the local community concerning the perceived health risk for this site.

Between October 1998 and January 1999, significant and unnecessary amounts of time and resources were committed on the part of the government agencies involved with Katy Field as well as Rhode Island congressional staffs to address fears within the community about a threat which did not actually exist. Even more costly than this time and effort, is the potential long-term damage to the Navy's credibility as a trusted neighbor within the local community of Newport, Rhode Island.

To prevent a repeat of the Katy Field incident at other Navy activities, the Chief of Naval Operations tasked the Navy Environmental Health Center with conducting a detailed case study. This case study identifies the successes and breakdowns in the Navy's efforts in environmental risk management, partnering, and community involvement associated with Katy Field. The lessons learned from these successes and breakdowns are summarized in three recommendations for all Navy Bases with IR sites:

- (1) Allow for stakeholder involvement in Installation Restoration site land use decisions whenever possible.
- (2) Work to build and maintain open lines of communication between stakeholder groups and agencies to help foster long term trust.
- (3) Plan and coordinate public outreach efforts that incorporate risk communication principles.

These three recommendations all have roots within risk communication theory. It was the eventual incorporation of risk communication principles into the Katy Field public outreach effort between late November 1998 and January 1999, which led to a successful ending to the crisis. This success highlights the primary conclusion from the Katy Field Case Study:

To help avoid additional public communication crises, all Installation Restoration, environmental management, and public affairs personnel should attend risk communication training and actively practice the skills they learn.

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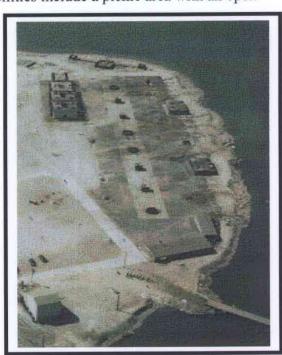
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SITE HISTORY

The Old Fire Fighter Training Area

Katy Field, formerly known as the Old Fire Fighter Training Area, is located on the northern end of Coasters Harbor Island on the Naval Station Newport (NAVSTA Newport). It is a 5.5-acre recreation area adjacent to Narragansett Bay. The facilities include a picnic area with an open

pavilion, a playground, and a baseball field. Fire fighting training activities were conducted on 1-2 acres of the site from World War II to 1972. The majority of the training activities were conducted in the buildings constructed to simulate ship compartments, on a concrete pad with burning areas, and on other paved areas. By 1972, most structures associated with fire training activities were demolished. Building 144 is the only structure remaining on site. The building was used for a child day-care center after the fire fighting training facilities were closed and demolished. In 1976, recreation facilities including ballfields and a playground were constructed. In 1994, the child day-care center was relocated to an off-site, newly constructed facility adjacent to the Armed Forces YMCA.



Old Fire Fighter Training Area 1944

National Priority Site Listing

In 1989, NAVSTA Newport (formerly known as the Naval Education and Training center, NETC) was listed on the National Priorities List (NPL) primarily because of the McAllister Point Landfill and Tank Farm #1 sites. A Federal Facilities Agreement (FFA) for NAVSTA Newport was signed in March of 1992 between the Department of the Navy, the Rhode Island Department of Environmental Management (RIDEM), and the U.S. Environmental Protection Agency (EPA). This agreement details the regulatory partnership and framework for completing Installation Restoration Program activities on NAVSTA Newport. A Phase I Remedial Investigation was initiated in 1992 to quantify the materials in the soil and groundwater resulting from the past use of Katy Field. In 1994, the Agency for Toxic Substances and Disease Registry (ATSDR) completed a Public Health Assessment (1994 PHA) for NAVSTA Newport. The Navy worked in a partnership with EPA and RIDEM in 1994 to perform additional remedial investigations and

to produce a Human Health Risk Assessment (1994 HHRA) for Katy Field. The Navy's interpretation of the data in the 1994 HHRA and the 1994 PHA led to the conclusion that the site is acceptable for recreational use. As part of the partnership with EPA and RIDEM, their personnel reviewed and commented on all documents. No formal disagreements were raised concerning the Navy's conclusion that Katy Field is safe for recreational use.

Katy Field as a Recreation Site





Katy Field Playground and Picnic Equipment



Between 1994 and 1998, the Navy continued to use Katy Field for recreational purposes. This included scheduled events such as Command picnics and fireworks displays as well as open use of the facilities by military personnel and their families. In addition, the Morale, Welfare, and Recreation (MWR) Department of NAVSTA Newport continued to sponsor other activities up through the summer of 1998 that involved children using the playground and other recreation facilities on Katy Field.

One scheduled or routine activity was the annual Military Youth Summer Day Camp which operated out of the Gymnasium, Building 1801, and used Katy Field's playground facilities between June and August each year for a few hours each day.

In the spring of 1998, two actions occurred which increased the use of Katy Field.

1. MWR initiated the process to move the Military Youth Summer Day Camp from the Gymnasium to Building 144, located on Katy Field. Due to limited space in the Gymnasium, MWR needed a new location to house the day camp. Building 144 seemed a logical choice because it was vacant, had been a child-care facility in the past, and was adjacent to the Katy Field playground the children used each year as part of the Day Camp.



Back view of Building 144 and Playground

2. The Commanding Officer of NAVSTA Newport received a request by the Middletown Rhode Island Little League to use the Katy Field baseball diamond during the summer of 1998. The Legal Officer, Public Affairs Officer, Executive Officer, and Commanding Officer reviewed the request. Based on the fact that military and civilian employees and dependents were currently allowed to use the baseball diamond for recreation activities, no concerns were raised about allowing the Middletown group to use the site. The Public Works Department, including the Environmental Division, was not included in this decision making process.



Katy Field Baseball Diamond

PURPOSE OF KATY FIELD CASE STUDY

Two land use management decisions concerning Katy Field were made in the spring of 1998 that eventually became the center of controversy in the fall of 1998.

- 1. The decision to relocate the Military Youth Summer Day Camp to Building 144
- 2. The decision to allow the Middletown Little League to use the baseball diamond on Katy Field

The controversy surrounding these decisions focused on the possible health risks to children who played on Katy Field and may have been exposed to contaminated soil on this Installation Restoration (IR) site. The circumstances surrounding the two decisions and the reaction of the various stakeholder groups led to extensive local media coverage, significant community concern, and unnecessary elevation of the issue to high levels within the Navy and Congress.

Lack of coordination and communication between the EPA, Navy, and ATSDR and the lack of an immediate and consolidated risk communication effort, led to extensive media coverage of Katy Field. This coverage escalated public fears by presenting a non-existent health risk as a real-time threat to local children. Between October 1998 and January 1999, significant amounts of time and resources were committed on the part of the Navy, Rhode Island congressional staffs, the EPA, ATSDR, and RIDEM to address fears within the community about a threat which did not actually exist.

To prevent a repeat of the Katy Field public relations incident at other Navy activities, the Chief of Naval Operations (CNO) tasked the Navy Environmental Health Center (NEHC) with conducting a detailed case study.

This case study is intended to identify the successes and breakdowns in the Navy's efforts in environmental risk management, partnering, and community involvement associated with Katy Field.

The evaluation begins with the Navy's decision in the spring of 1998 to expand the use of Katy Field from one of casual recreation to a site where organized youth activities were held. The study concludes with the release of the final Public Health Consultation by ATSDR in the spring of 1999. It contains a narrative account of the major actions and reactions among the stakeholder groups and recommendations based on lessons learned and risk communication principles to help avoid this type of public relations incident in the future.

STAKEHOLDER ACTIONS AND REACTIONS

EPA Expresses Concern

In April of 1998 EPA personnel expressed concern to the Northern Division Naval Facilities Engineering Command (NORTHDIV) over an article published in the April 17, 1998 issue of the

Newport Navalog, NAVSTA Newport's weekly newspaper. The article showed a picture of children playing on Katy Field and discussed the Youth Camp which would be open in Building 144 during the summer of 1998 to military and civilian dependants.

Personal knowledge of the Katy Field site history and interpretation of the information in the article led EPA Region I to two very important conclusions.

- EPA believed that there would be an increased use of Katy Field by children and,
- 2. As a result, increased potential health risk to these children from exposure to soil at the site.



Building 144 Playground Equipment – Open to Katy Field

Between April and June of 1998, personnel from NORTHDIV, EPA Region 1, and NAVSTA Newport had informal discussions and correspondence (e-mail) regarding the EPA's concerns over information in the Newport Navalog article. Based on these discussions and emails, NORTHDIV personnel believed that the EPA's primary concern with Katy Field was the risk to children from increased exposure to lead at the site. In an attempt to alleviate this concern, NORTHDIV ran the EPA's IEUBK model that estimated site-specific exposure to lead using concentrations measured during previous sampling events. Using the average concentration of lead across the site, the IEUBK model did not indicate any elevated health risks for children playing on Katy Field. The Navy discussed these findings with EPA in May of 1998.

ATSDR Requested to Conduct a Public Health Consultation

In June of 1998, an informal request for ATSDR to conduct a Public Health Consultation (PHC) on Katy Field was made during a conversation between personnel from EPA Region I and ATSDR. The purpose of the consultation was to assess if an increased risk to the health of

children or adults exists at Katy Field. The Navy
Environmental Health Center was notified via telephone of
EPA's request and that the process for completing this PHC
would be different than what was typically done for Navy
sites. The ATSDR Region I office was planning to prepare
the PHC versus the ATSDR headquarters personnel in
Atlanta, Georgia, which was the normal process. NEHC
was assured that headquarters personnel would be
reviewing the draft and would send a copy to NEHC for
review as soon as it was completed.

At this time, there was no indication that Katy Field was a higher than usual priority for ATSDR, and there was no indication that the situation had the potential to become contentious.

EPA Officially Disagrees with NORTHDIV Over the Safety of Katy Field

On July 21, 1998, NORTHDIV submitted a formal copy of the results of the IEUBK lead model to EPA Region I. At this point, NORTHDIV personnel felt the Navy had responded to EPA's concerns and that the issue was on its way to being resolved. The EPA did not agree with the Navy's estimation of risk from lead exposure at Katy Field as calculated by the IEUBK model. A letter was sent from EPA Region I on July 28, 1998, to NORTHDIV. In the letter, EPA acknowledged receipt of the Navy's IEUBK model results and discussed their disagreement with the Navy over potential health risks to children using Katy Field for activities "substantially similar to the existence of a Day Care Center." The letter also indicated disappointment that the Navy was focusing their recent analysis of the site solely on lead when it is known to be contaminated with other compounds.

On the issue of lead exposure at the site, the EPA strongly disagreed with the Navy. Their July 28th letter stated that they also ran the IEUBK model for lead exposure at Katy Field.

Instead of using the average concentration from samples taken at the site, which is the generally accepted guidance from the EPA, the Region I office chose to run the model using the highest

The EPA findings from the IEUBK model indicated an elevated risk to the safety of children playing on the site.

concentration detected. Of the 40 lead samples taken from the Katy Field site, the highest value was 2970 mg/kg. All other samples were below 400 mg/kg with results from 31 of the 40 samples below 100 mg/kg. The high concentration was considered an outlying value by the Navy, and not representative of the overall level of exposure at the site. EPA guidance indicates that exposure to areas with lead in soil concentrations below 400 mg/kg is considered safe for the public. This includes residential scenarios that would potentially result in more exposure to the soil than expected under the recreational scenario applied to Katy Field. Because each of the remaining samples, as well as the average concentration, were below this safety limit, the Navy

concluded the site was safe. The EPA's rationale for using the high value was that there were too many data gaps to allow the use of the average concentration. They decided to use what they considered the worst case scenario, which resulted in their conclusion that Katy Field is not a safe play area for children.

The July 28th letter also included a discussion of the 1994 HHRA for Katy Field that was approved by the EPA. EPA Region I personnel decided to re-review the 1994 HHRA because they no longer felt it was conservative enough in its estimate of risk to children.

A copy of the EPA's July 28th letter which includes details on the reasoning behind their newly formed opposition to the 1994 HHRA is included in Appendix A.

Prior to receiving the July 28th letter, neither NORTHDIV personnel nor the NAVSTA Newport Environmental staff was aware of the magnitude of EPA's concerns and oppositions over the use of Katy Field.

Both NORTHDIV and the NAVSTA Newport Environmental Office reviewed the EPA's letter. Based on the inflammatory language used and the apparent call for the Navy to restrict access to Katy Field, NAVSTA Newport decided to organize and send the Navy response. Up until this point, the Navy was under the impression that the only compound that the EPA was concerned with at Katy Field was lead. NORTHDIV felt they had addressed this concern adequately with their submission of the IEUBK lead model results. The Navy was not aware of the EPA's disagreements with the 1994 HHRA, and they were not expecting the letter that was received.

ATSDR Provides the Initial Public Health Consultation to the Navy

On October 8, 1998, ATSDR provided the draft Public Health Consultation for Katy Field to the Navy. The report indicated two important issues of concern.

- 1. The potential for elevated risks to children from exposure to lead at Katy Field did exist
- 2. But, insufficient data was available to determine the actual levels of risk.

As a precaution, based on the draft report results, the Commanding Officer of NAVSTA Newport directed the MWR department to stop using Katy Field as a play area for any children participating in their programs.

The Navy Environmental Health Center (NEHC) acts as liaison for the Navy with ATSDR and reviews all Public Health Assessments and Consultations that ATSDR produces for Navy sites. Upon review of the draft PHC, NEHC noted several discrepancies that led to conclusions and recommendations in the document that were not accurate. One major discrepancy was that ATSDR had not used all of the available sampling data. The results in the draft PHC were based only on a review of the data ATSDR had on file. Their personnel did not realize that the Navy had completed additional sampling at the site following ATSDR's recommendation in their

1994 PHA conducted for NAVSTA Newport. As a result, they had not requested any additional data from the Navy for inclusion in this PHC.

NEHC personnel knew that the PHC draft, like other ATSDR initial draft documents, was a working document. They planned to work with ATSDR to gather and incorporate all of the necessary information. At this point, they did not consider this site to be higher priority than any other site. NEHC had received no indication that the disagreement between EPA Region I and the Navy was becoming contentious or that there was any possibility that the results of this PHC initial draft would ever be released to the press or the public.

The Navy Provides Official Response to EPA's Concerns

As of the middle of October 1998, NAVSTA Newport had still not officially responded to EPA's letter of July 28, 1998.

Conversations and email correspondence had occurred during which EPA personnel questioned the amount of time the Navy was taking in responding to their concerns. NAVSTA Newport continued to instruct NORTHDIV not to respond to the letter, because they were preparing the response.

On October 27, 1998, NAVSTA Newport sent a response to EPA's letter of July 28, 1998. The letter stated that due to disagreements on technical points between the EPA and the Navy, NAVSTA Newport had "decided to err on the side of caution and safety and enhance controls at the site." NAVSTA Newport proposed replacing the first two feet of topsoil with clean fill in the area adjacent to Building 144 (up to as much as two acres) and installing a perimeter fence (five to six feet high) to restrict access. In addition, Navy personnel would be instructed to discontinue use of the site until the permanent controls were complete in an estimated 60-90 days.

A copy of the Navy's response of October 27th is included in Appendix A.

The First of Many Katy Field News Stories Hits the Press

On the same day, October 27th, the Associated Press released a story including interviews with EPA and NAVSTA Newport personnel questioning the safety of children who had played on Katy Field. The report identified an anonymous source of information, but did state that the person attended the NAVSTA Newport Restoration Advisory Board (RAB) meeting on October 21, 1998. EPA personnel informed the Navy that several RAB members and visitors requested a copy of EPA's July 28th letter following the RAB meeting. The letter was part of the public record, and therefore, EPA provided the copies.

Congressional Involvement Elevates Concern

Congressman Patrick Kennedy of Rhode Island became involved in the Katy Field issue on October 28, after reading the newspaper coverage.

Congressman Kennedy sent two letters on the 28th of October to Navy Secretary Dalton and Carol Browner the EPA Administrator.

- In his letter to the Navy, Congressman Kennedy urged "immediate action to ensure the safety of all the children who have been using Katy Field." He acknowledged the difference in opinion between the Navy and the EPA over the safety of Katy Field, and stated that he "must choose to opt on the side of extreme caution." The letter stated that the Congressman had learned that the EPA was considering legal actions to prompt the Navy to act, and he wanted the proposed fence to be built immediately to ensure the safety of the children. In addition, he requested that the Navy offer immediate testing at its medical facilities to all children who have played at the park.
- In his letter to Carol Browner of the EPA, Congressman Kennedy stated his support
 of the EPA's position on Katy Field and encouraged the agency to take the appropriate
 actions to ensure the safety of the children. He outlined the requests he made of the
 Navy in his letter to Secretary Dalton, and he attached a copy of the letter.

A copy of each of Congressman Kennedy's letters is attached in Appendix A.

On October 28th,
Congressman Kennedy
also released a statement
to the media entitled,
"Kennedy Urges Navy
Secretary Dalton to
immediately erect a fence
at Navy park, offer testing
of children possibly
exposed."

The release summarized the Congressman's requests to the Navy and his letter to the EPA. He stated that the Navy disputed some of the contamination studies and didn't close the park until it received repeated warnings from the EPA. The release quoted his October 28 letter to the Navy saying, "common sense dictates that if there is any chance that even one child is threatened by the park, the Navy should take immediate steps to address the issue." NAVSTA Newport erected a fence around Katy Field four days later on November 1, 1998.

Fence Around Katy Field



A meeting was held on November 3, 1998, in Washington D.C. during which the federal agencies involved with Katy Field (the Navy, EPA, and ATSDR) briefed the Deputy Staff Director of the U.S. Senate Committee for Environment and Public Works. The discussions focused on the following:

- 1. Potential sampling gaps at the site
- 2. The perception that the use of Katy Field by children had intensified during the summer of 1998
- 3. The assumptions used in the Navy's 1994 Human Health Risk Assessment.

The meeting concluded with the Navy agreeing to take additional samples to fill the possible data gaps at Katy Field. The Navy was urged to complete this sampling before Thanksgiving 1998.

Extensive Media Coverage

Between October 28, 1998 and November 6, 1998, at least seven articles with a negative slant towards the Navy appeared in the local newspapers in the Newport, Rhode Island area. The articles highlighted disagreements between the EPA and the Navy concerning Katy Field. Several cited the July 28, 1998 letter from the EPA to the Navy. The articles alleged that the Navy was going against the advice of the EPA and allowing children to be put in danger by playing on a superfund site.

Examples of the headlines include "EPA prods Navy to shut playground built on Superfund site in Newport", "Parents upset Navy let children on contaminated site", and "Little League held games at field on site of toxic waste."

The Navy responded by preparing a news release on November 6, 1998.

The Navy news release entitled "Navy and EPA team-up on playground at Naval Station" was virtually ignored by the media with no articles printing this release.

Copies of the news release and the newspaper articles are included in Appendix B.

Congressional Request for a Town Hall Meeting

In response to the media frenzy, Congressman Kennedy requested that the Navy host a public meeting on November 23, 1998. The purpose of the meeting was to answer questions from concerned parents whose children had played at Katy Field and hopefully alleviate their fears about their children's health and safety. On November 17, 1998, EPA provided the Navy with a draft copy of the statement they planned to give at the public meeting.

The EPA proposed statement highlighted the disagreements between the EPA and the Navy over the interpretation of the 1994 risk assessment results and the parameters and assumptions used in the 1994 HHRA.

An EPA representative warned the Navy in an email that the EPA would contradict publicly any claims made by the Navy that the 1994 study used conservative assumptions and indicated acceptable levels of risk.

See Appendix A for copies of the proposed statement and the email.

Congressional Intervention, Demanding the EPA and the Navy Work Together

Senator John Chafee of Rhode Island sent a letter addressed jointly to Administrator Browner of the EPA and Navy Secretary Danzig on November 19, 1998. The letter criticized both the Navy and the EPA for a breakdown in the communication process which "caused the affected community serious anxiety that might have been avoided." He acknowledged that it is

perfectly plausible for agencies to disagree over the interpretation of scientific information regarding contamination risks, but he expects agencies to resolve their differences quickly and work together to provide a unified message to the public.

Excerpts from Senator Chafee's letter were quoted in a local newspaper article on November 20, 1998 entitled, "Chafee rips EPA on playground."

At this point media coverage of the event began to turn from just anti-Navy to both anti-Navy and anti-EPA. The article stated that according to Senator Chafee, "The U.S. Environmental Protection Agency should share the blame along with the Navy for allowing children to play on a contaminated park at the Newport Naval Complex." The letter is quoted as saying "the EPA should have insisted that the Navy bar children from the field in the spring when it discovered Katy Field was being used for recreational activities."

A copy of Senator Chafee's letter is included in Appendix A, and a copy of the newspaper article is attached in Appendix B.

The First Town Hall Meeting

Congressman Kennedy opened up the town hall meeting on November 23, 1998 by criticizing the EPA and Navy for their "in-fighting" and calling for the agencies to give the "straight story."

The congressman praised the Navy for responding to his requests that the Navy provide free health screening services and erect a fence around Katy Field.

Providing free health screening to the local community was no easy task for the Navy. The effort was coordinated by the Deputy Commander of Health Care, New England and required teamwork from multiple levels within the Navy Bureau of Medicine and Surgery (BUMED) chain of command. To provide medical screening services to non-Navy personnel required special permission from BUMED to overcome legal barriers. In addition there were potential manpower and logistical concerns associated with conducting the screening and adequately notifying the community. To streamline and simplify the effort, one point of contact was designated within the NAVSTA Newport Occupational Health Clinic to handle all of the screenings. In addition, the Navy Environmental Health Center assisted by preparing Fact Sheets for dissemination within the local community explaining where, when, and how they could take advantage of the free medical screening.

The Congressman was followed by presentations from the Navy, EPA, ATSDR, and RIDEM.

The floor was opened up to questions following the presentations. In closing, Congressman Kennedy announced a follow-up town hall meeting planned for January 1999. The

Although the messages from the various government agencies did not directly contradict one another, there was not one unified, easy-to-identify message conveyed by all of the agencies.

purpose of the meeting was to discuss the results from the additional sampling and the final Public Health Consultation by ATSDR.

The media coverage in the local newspapers during the week following the town hall meeting continued to be critical of the Navy and EPA. The newspaper articles and television broadcasts were fueled by comments from a few vocal members of the public. The coverage tended to overstate the level of anger expressed by members of the community during the question and answer session.

Copies of the newspaper articles from this time are attached in Appendix B.

On December 1, 1998, the EPA sent a letter and questionnaire to the parents of the children who attended the summer day camp or participated in the Little League baseball games. The letter announced an open house on December 9th and 10th at which the EPA would be available to

"listen to your concerns and answer any questions about the site history, contaminants, or the investigations that are currently underway."

Both the EPA and the Navy were present at the open house. The Navy Environmental Health Center prepared poster displays and fact sheets for the open house and sent a representative to answer questions and address concerns.

Additional Sampling Conducted

The results from the 37 additional samples taken from Katy Field in November 1998 by the Navy were completed on December 24, 1998. The samples were tested for volatile organic compounds (VOCs), semi-volatile organic compounds, poly-chlorinated bi-phenyls (PCBs), pesticides, inorganic chemicals (including lead), and dioxins. The results indicated that the surface soil at Katy Field does not present a health hazard to adults or children who played at the site. The Navy issued a press release announcing the testing was complete. A follow-up town hall meeting was scheduled for January 25, 1999.

Agency Teamwork in Preparation for the Second Town Hall Meeting

To prepare for the town hall meeting, a conference call was held on January 21, 1999. During the call, representatives from the Navy (DASN, NORTHDIV, and NEHC), EPA, ATSDR, and RIDEM discussed the joint messages that would be conveyed to the community by the government agencies.

All agencies agreed on three key messages

- (1) Katy Field was safe for all recreational uses that had historically occurred on the site.
- (2) No one is likely to experience health problems from contact with soil at Katy Field.
- (3) Katy Field should remain closed until all environmental investigations at the site are complete (due to the safety issues associated with large construction equipment and not because of any environmental risks).

The Second Town Hall Meeting

The follow-up public meeting was held on January 25, 1999 with all agencies conveying primarily the same three key messages. As a result, public reaction was generally positive with the majority of the people putting their fears to rest. Newspaper headlines during the week following the public meeting focused on the central message that the site is safe.

Examples of the newspaper headlines following the second town hall meeting include:

"No health risk at Katy Field, federal officials say,"
"Playground is safe, officials tell parents," and "Topsoil tests
quelled fears over Navy site."

Copies of these and other newspaper articles are attached in Appendix B.

Final Public Health Consultation Released - Fears Over Katy Field Put to Rest

The final Katy Field Public Health Consultation (PHC) document was released on March 31, 1999. On April 21, 1999, ATSDR hosted a public availability session. The purpose of the availability session was to answer questions on the results of the PHC, which indicated that exposure to soil at Katy Field does not pose a health risk to children or adults. Attendance was very low at the session with no real objections to the document, indicating that public concern over the site had diminished. For all practical purposes, the Katy Field incident was closed at this point, but not forgotten. Local residents are reminded daily of past doubts and fears concerning Katy Field when they pass by the fence which keeps the site closed off to the public still today. The media event is over, but effects such as diminished trust and credibility of the Navy within the local community will linger for quite some time. There are several lessons learned that may be taken from this event and used to help other Navy sites maintain trust and credibility within their local community.



Fence around Katy Field

LESSONS LEARNED

There are three primary recommendations from this case study that should be incorporated into other Navy environmental programs. All of the lessons learned from evaluating the Katy Field incident at NAVSTA Newport may be summarized into these three primary recommendations. They include the following:

- 1. Allow for stakeholder involvement in IR site land use decisions whenever possible.
- 2. Build and maintain open lines of communication between stakeholders and foster long-term trust between agencies and stakeholder groups through partnering.
- 3. Use a planned and coordinated public outreach effort that incorporates risk communication principles.

A discussion of each of the recommendations follows. The discussions use specific examples from the Katy Field story to highlight communication breakdowns. Hopefully by examining these problems, other Navy sites can avoid making similar mistakes that could result in time consuming and costly public relations events.

1. Navy activities should allow for stakeholder involvement in IR site land use decisions whenever possible.

Two critical decisions were made in the spring of 1998 concerning potential increase in the use of Katy Field. They were the decision to move the Summer Day Camp activities from the gymnasium to Building 144, adjacent to Katy Field, and the decision to allow the Middletown Little League to use the Katy Field baseball diamond. Neither decision involved input from all of the major stakeholders. At a minimum, the NAVSTA Newport Environmental Office and the NORTHDIV Remedial Project Manager (RPM) should have been consulted on both decisions and the Middletown

Little League should have been notified that Katy Field is located on an IR site before they were allowed access to the facilities. In addition, input from the EPA RPM for NAVSTA Newport may have proven helpful.

The EPA Region I RPM stated during her interview that if she had been allowed input into these decisions before they were made, then the incident may have been avoided.

The EPA and NORTHDIV could possibly have worked out their disagreements over the safety of the site before the additional or increased use was approved. This did not occur because the EPA RPM knew nothing of either land use decision before they were made. In addition, the Little League group received no prior notification of the history of the site and NAVSTA Newport's Environmental Office knew nothing about the request before permission to use the park was granted.

A key lesson learned from the Katy Field incident is that Navy land use decisions involving Installation Restoration (IR) sites and areas immediately adjacent should involve the use of a standardized review and approval process.

The department responsible for Environmental Cleanup should always be included in this review and approval process. In addition, local community stakeholder groups as well as local, state, and federal regulatory groups should be allowed to provide input whenever possible. Incorporation of the thoughts and opinions of the various stakeholder groups such as the local Restoration Advisory Board (RAB), the EPA, and RIDEM into NAVSTA Newport's decision making process in the spring of 1998 may have prevented the heightened public concern and media event in the Fall of 1998.

2. Navy activities should build and maintain open lines of communication between stakeholder groups and agencies to foster long term trust.

Between the spring of 1998 and the beginning of 1999 there were numerous instances of breakdown in communication among the agencies and other stakeholders involved with Katy Field. Misunderstandings and ineffective information exchange occurred between the Navy and EPA, the Navy and ATSDR, and internally between different groups within the Navy. The lack of effective negotiation and risk communication skills in the every day interactions between Katy Field stakeholders in the spring and summer of 1998 helped pave the way for the negative media coverage and unnecessary public fears concerning Katy Field in the fall of that year.

The Navy and EPA: Communication Breakdowns

The initial breakdown in communication concerning Katy Field occurred between the Navy and EPA RPMs. After interviewing both the EPA Region I RPM for NAVSTA Newport and the Navy NORTHDIV RPM, it is clear that there was a misunderstanding between the two. The misunderstanding involved a clear definition of EPA Region I concerns about the site and the degree of this concern.

The NORTHDIV RPM felt the Navy was answering the questions and doubts the EPA had about Katy Field when he provided the IEUBK lead model results, which indicated the site is safe. The

inflammatory letter from EPA
Region I to NORTHDIV on July 28,
1998, stated that the EPA was in fact
not satisfied with the assumptions
made by the Navy in generating the
IEUBK results. In addition, it
highlighted for the first time
problems the EPA had with the 1994
risk assessment which they had
previously approved in writing.

The EPA's July 28th letter became a primary source of information used by the media to ignite public concern in the fall of 1998. It may have never been written if the RPM's had adequately identified their differences in opinion and used more effective communication skills during their meetings and correspondence to clear-up all disagreements.

Both the EPA and the Navy would have benefited from the use of risk communication and specifically active listening skills by their RPMs.

The Navy and ATSDR: Communication Breakdown

A second interagency communication breakdown concerning Katy Field occurred between the Navy Environmental Health Center and ATSDR. NEHC was informed about the PHC for Katy Field informally via telephone call. During this conversation and others that followed, NEHC and ATSDR representatives discussed the reasons for conducting the PHC, but they never discussed the time frame for completion or any assistance which the Navy could provide in gathering information. The ATSDR Region I office was tasked with preparing the PHC versus the headquarters personnel, which is the usual procedure for Navy activities. ATSDR headquarters assured NEHC that they would receive a first review of the initial draft, especially in light of this change in procedure.

It is understood between the federal and state agencies that initial draft or validation Public Health Assessment or Public Health Consultation documents are not intended for distribution to the public. Based on the nature of this policy, verbally stated versus written, it is always possible that information from a draft document may be prematurely released to the public.

ATSDR has stated repeatedly in meetings with representatives from the Department of Defense that their policy is to prepare a validation draft (also called an initial draft) of their Public Health Assessment and Public

Health Consultation documents. This validation draft is provided to all primary stakeholders including the DOD agency, the Environmental Protection Agency, and the state environmental regulatory group for review and comment prior to the initial release to the public. Because this is not a formal, written policy, the draft document was provided to Congressman Kennedy upon his request. He in turn quoted the document in a statement to the press. The premature release of this information proved to be disastrous for the Navy.

As it turned out, the Navy disagreed with the recommendations of the draft PHC for several reasons, primarily because ATSDR had not used all available data in reaching their conclusions. They did not have this data because ATSDR Region I personnel did not request input from the Navy during preparation of the initial draft document. As a result, their document was

incomplete and needed a large amount of revision. But before the stakeholders could work together to update and gather data for the site, the inaccurate conclusions from this first draft were presented to the public through the news media. The release of the inaccurate PHC information may have been avoided if the Navy and ATSDR had discussed up front the information to be included in the PHC and assumptions that would be made. Instead the Navy relied on the comment period to identify large data gaps missing from the information ATSDR used to generate the report.

A lesson learned from this unfortunate event is that Navy personnel should never trust that a document, based on its status as a draft, will not reach the public or the news media and be interpreted as absolute truth.

This lesson learned highlights the importance of producing the most complete and accurate initial draft documents as possible. Frequent communication between government agencies combined with a unified approach to answering public health questions and concerns will help this happen. Effective communication and a team effort between the government agencies involved with Katy Field would likely have produced a PHC initial draft including accurate data and conclusions. This may have prevented the Katy Field public relations crisis in the fall of 1998.

The Navy: Communication Breakdowns within the Agency

The third major example of communication breakdown during the Katy Field incident occurred within the Navy and involved NAVSTA Newport personnel and NORTHDIV personnel.

NAVSTA Newport personnel realized quickly that it was not going to be easy to reply to the EPA's letter of July 28, 1998. As discussed earlier, they were not expecting this inflammatory letter or the lengthy list of action items associated with it.

In a high concern, low trust situation such as the Katy Field exposure issues, risk communication principles stress stakeholder involvement as an integral part of dispute resolution.

Developing a plan of action immediately which included a meeting between NORTHDIV, NAVSTA Newport, and the EPA to negotiate a response to the key action items in the letter would have been an effective way to ensure stakeholder involvement. In reality, there were no meetings or negotiations that involved all of the stakeholders working together until the situation was escalated into a controversy by the negative media coverage in late October and early November of 1998.

Interviews with personnel from NAVSTA Newport, NORTHDIV, and the EPA revealed that the effort made to address the EPA's July 28th letter was somewhat fragmented and unorganized. In trying to handle the situation themselves, NAVSTA Newport personnel often left the NORTHDIV RPM out of the information loop. Conversations and informal written

communications between NORTHDIV, EPA Region I, and NAVSTA Newport often contained conflicting information. As a result, it appeared to EPA personnel that the two Navy groups, NORTHDIV and NAVSTA Newport, were not working together on the project.

During interviews with the EPA RPM, she indicated her impression was that the two Navy groups could not decide whose responsibility it was to reply to the letter, and that they were either stalling in providing the requested information or simply not taking EPA's concerns seriously.

NORTHDIV and NAVSTA Newport personnel had in fact decided after receiving the July 28th letter that NAVSTA Newport would prepare the Navy response and NORTHDIV would provide the technical information needed. But due to numerous disagreements among the NAVSTA Newport staff about the nature of the response, there was a very lengthy delay of almost three months before it was officially provided to the EPA.

The lengthy delay in responding to the EPA's letter, combined with conflicting information from the two Navy groups, led to numerous misunderstandings and miscommunication which have seriously eroded the trust between the Navy and EPA Region 1.

By using effective risk communication skills, Navy personnel may have been able to preserve this trust that was built over the years between the two agencies.

The examples given above of communication breakdown and loss of trust among the Navy, EPA, and ATSDR highlight a very important lesson learned from the Katy Field public relations incident. The lesson is that negotiation and listening skills need to be incorporated into all IR Program communications, regardless of how informal or apparently inconsequential. To help accomplish this goal, all Navy RPMs and environmental program managers should be formally trained in effective negotiation and risk communication skills.

With proper training, Navy personnel will have the tools they need to help build and maintain trust between stakeholder groups and incorporate risk communication philosophy into their daily work practices.

3. All Navy activities should plan and coordinate a public outreach effort that incorporates risk communication principles.

The NAVSTA Newport efforts to respond to the negative press concerning Katy Field in the fall of 1998 provide several examples of why risk communication training is needed for all Navy personnel responsible for delivering information to the public. Three messages from this training may have helped Navy personnel avoid the problems associated with the Katy Field public relations effort.

- Conduct advanced planning and preparation for media interviews and public meetings.
- Recognize the importance of timing in the public's perception of truth.
- 3. Develop a working relationship with local reporters to ensure our side of the story is told.

Conduct advanced planning and preparation for media interviews and public meetings

Risk communication literature stresses the importance of developing key messages and anticipating questions prior to any media interviews or public meetings. In addition, only people who are skilled in public speaking and have a working knowledge of risk communication should be selected to represent their organization. After reviewing the available media coverage concerning Katy Field and the files and transcripts available on the first public meeting in November 1998, it appears that there was not sufficient advanced effort to ensure the public received the Navy's key messages.

The first newspaper articles and TV interviews concerning Katy Field used sound bites and clips from the interviews with NAVSTA Newport personnel that did not convey the appropriate and important messages from the Navy.

The responses to tough questions, which should have been anticipated, indicated that either the speaker did not have the communication skills necessary to handle a media interview or that virtually no advanced preparation had been done.

Based on interviews with Navy and EPA personnel, it is clear that both agencies planned and prepared for the town hall meeting in November 1998, but a team approach was not used. The

Navy and EPA did not work together to develop their key messages for the public meeting. As a result, their differences in opinion were once again apparent to the concerned community and highlighted by the media. The Navy's positive messages were virtually ignored.

To prepare for the second town hall meeting in January of 1999, the agencies involved met and decided on the key messages that needed to be conveyed to the public. The EPA and the

Navy were now working together to solve the problem in the eyes of the community. The media coverage following the second meeting was balanced and public concerns were alleviated.

Meeting with the other stakeholders and agencies involved to develop joint key messages prior to the first meeting in November may have helped to restore some of the public's trust of the Navy which was lost during this incident.

Recognize the importance of timing in the public's perception of truth

NAVSTA Newport's news release was not issued until one week following the initial negative media coverage of Katy Field in October 1998.

Risk communication literature recommends you take no more than 48 hours to dispute a negative claim in a high concern, low trust situation such as Katy Field.

By the time the Navy's side of the story was released, public opinion was already formed. In addition, the media used the Navy's lack of a timely response to EPA's concerns about the potential risks at Katy Field against us. Various newspaper articles during October and November 1998 drew attention to the time that elapsed before the Navy responded to the EPA's letter of July 28, 1998. The articles implied that the Navy did not take the EPA's concerns seriously and/or did not care about the well being of the children. This implication provided fuel for the public outrage towards the Navy that erupted in the fall of 1998. Immediate responses in both situations may have helped the Navy maintain the trust and credibility they had earned over the years within the community.

Maintain a working relationship with local reporters to ensure your side of the story is told

None of the local newspapers printed the Navy news release on Katy Field that came out one week after the story hit the media. Based on interviews with NAVSTA personnel, no one had really worked to develop a relationship with any members of the local media. If they had, the Navy's story may have been printed early on and helped to curb some of the fears developing within the community over the safety of Katy Field.

The Katy Field media crisis exemplifies the need for an effective community involvement plan that incorporates risk communication theory at every Navy activity. Three of the key principles of risk communication were apparently lacking from the NAVSTA Newport public outreach efforts in the fall of 1998. Navy personnel did not do adequate advanced planning and preparation for media interviews and public meetings. They did not recognize the importance of

timing in the public's perception of truth. And lastly, they did not develop a close working relationship with local reporters to ensure publication of the Navy's side of the story. The media coverage concerning Katy Field in the fall of 1998 highlights the need for effective risk communication skills when conveying environmental health and safety information to the public. Specific training is available to meet this need.

Navy Public Affairs personnel and other management personnel, which may be called upon to represent their command during media interviews or public meetings, should have risk communication training and develop skills to use these tools.

CONCLUSIONS

Public concern surrounding Katy Field on NAVSTA Newport in the fall of 1998 was preventable. There were several opportunities between April 1998 and October 1999 where the use of effective communication skills could have changed the course of this incident. As a result, what appeared to be a simple difference in opinion between Remedial Project Managers (RPMs) over an Installation Restoration site escalated over time and erupted into controversy in the fall of 1998 for all Federal agencies involved with Katy Field.

Even more costly than the time and efforts spent to calm fears within the local community over a perceived versus actual risk, is the potential long term damage to trust and credibility which was lost within the local community of Newport. In addition, the working relationship between personnel from the agencies involved in the cleanup of installation restoration sites on NAVSTA Newport may also suffer from a loss of trust. Without trust and an open working relationship, it will be difficult for this team to effectively manage and negotiate clean-up operations.

Three primary recommendations came from the lessons learned at Katy Field, which may prevent this type of event at other Navy activities or lessen the damage to trust and credibility among the stakeholders involved.

- 1. Navy activities should allow for stakeholder involvement in IR site land use decisions whenever possible.
- 2. Navy activities should work to build and maintain open lines of communication between stakeholder groups and agencies to help foster long-term trust.
- 3. Navy activities should plan and coordinate public outreach efforts that incorporate risk communication principles.

All three recommendations have roots within risk communication theory, and virtually all of the lessons learned highlight one conclusion.

The first step towards achieving an effective community involvement program is adequate training.

None of the personnel involved with Katy Field had attended Risk Communication training, and they did not recognize the signs that this situation might develop into one of high concern and low trust within the local community.

The results of this lack of training were apparent in the initial public outreach and community education efforts in response to the negative media coverage of Katy Field. To prevent a similar situation on other Navy Bases, all personnel involved with the Installation Restoration and other environmental programs, as well as public affairs personnel, should attend the 3-day Risk Communication Workshop offered by CECOS and be able to use the skills they learn. It is especially important for personnel involved in IR program management, environmental management, and public affairs to practice the skills they learn during the workshop.

One final lesson learned, which is not associated with training, is apparent after reviewing the case study. Although it was not mentioned specifically in the recommendation section of this document, it stands out as common sense prevention. Navy activities must be cautious when changing or increasing the frequency of use for IR sites that have not been cleaned up to residential remediation goals. It is imperative that all agencies are in agreement about the safety of an IR site before the land use options are changed in any way. Opening these sites to personnel, their families, and the outside community presents great potential liability for the Navy. Formal documentation of the decisions made and outside agency review must be obtained in the event that future public safety standards or concerns differ from those of today.

Katy Field as a Navy Success Story

In closing, it is important to highlight that there was a successful ending to the Katy Field media crisis. This successful ending coincided with the incorporation of risk communication principles and theory into a unified public outreach effort among the government agencies involved. The initial efforts to communicate information on the perceived health risks at Katy Field were not successful because of disagreements between the agencies, which were amplified by negative media coverage and the lack of a unified message at the first public meeting in November of 1998.

Between November 1998 and January 1999, the government agencies achieved successful stakeholder involvement by working together and listening to one another. The agencies combined teamwork with negotiation and compromise to ensure a successful risk communication effort at the second public meeting in January 1999. As a result, their goal was achieved, to inform and educate the public and alleviate fears over a perceived health risk that never existed.

Appendix A

Supporting Documentation

Katy Field: Supporting Documentation

Document	<u>Page</u>
United States Environmental Protection Agency Region I letter to James Shafer (Remedial Project Manager, Naval Facilities Engineering Command, Northern Division) on July 28, 1998	A1
Naval Station, Newport letter to Kymberlee Keckler (US EPA Region I) on October 27, 1998	A6
Congressman Patrick Kennedy's letter to Navy Secretary John Dalton on October 28, 1998	A7
Congressman Patrick Kennedy's letter to EPA Administrator Carol Browner on October 28, 1998	A9
Kymberlee Keckler of EPA Region I email on November 17, 1998	A10
EPA Region I Draft Statement for Katy Field Town Hall Meeting of November 23, 1998	A12
Senator John Chafee's letter to EPA Administrator Carol Browner and Navy Secretary Danzig on November 19, 1998	A15

Appendix B

News Media Coverage

Katy Field: Inventory of Available Newspaper Coverage

Article Title	Source	<u>Date</u>	<u>Page</u>
Navy Playground here sits on Superfund site	Newport Daily News	10/28/1998	B1
EPA prods Navy to shut playground built on Superfund site	The Providence Journal	10/29/1998	В3
Navy closes Superfund playground	Newport Daily News	10/29/1998	В6
Parents upset navy let children on contaminated site	Newport Daily News	10/31/1998	B7
Navy and EPA team up on playground at Naval Station	Navy News Release	11/6/1998	B8
Little League held games at field on site of toxic waste	The Providence Journal	11/6/1998	B11
Navy takes heat over Katy Field response	Newport Daily News	11/6/1998	B12
Test reveals high lead content at Navy playground	The Providence Journal	11/9/1998	B13
Navy to answer questions about contaminated field	Newport Daily News	11/17/1998	B14
Navy to answer questions about Katy Field	The Providence Journal	11/17/1998	B15
Chafee rips EPA on playground	Newport Daily News	11/20/1998	B16
Angry parents heard at forum on Navy playground	The Providence Journal	11/24/1998	B17
Parents remain fearful about Katy Field	Newport Daily News	11/24/1998	B19
Chafee criticizes Navy, EPA over Katy Field issue	The Providence Journal	11/25/1998	B20
Bad situation made worse by Navy, EPA	Newport Daily News	11/27/1998	B21
EPA seeks Katy Field information	Newport Daily News	12/5/1998	B22
EPA to hear residents' concern over Katy Field	The Providence Journal	12/8/1998	B23
Katy Field kids questioned	Newport Daily News	12/10/1998	B24
Additional samples from Katy Field arrive from the laboratory	Navy News Release	12/29/1998	B25
Navy awaits evaluation of 37 soil tests at Katy Field	The Providence Journal	12/30/1998	B29
Parents await translation of tests	Newport Daily News	12/30/1998	B30
Parents awaiting analysis of test on contaminated playground at Navy base	Soundings	1/6/1999	B32
Public to hear results of Katy Field tests	The Providence Journal	1/20/1999	B33
No health risk at Katy Field, federal officials say	The Providence Journal	1/26/1999	B34
Playground is safe, officials tell parents	Newport Daily News	1/26/1999	B35
Topsoil tests quelled fears over Navy site	Newport Daily News	1/27/1999	B37
Two more studies to be released on Katy Field	The Providence Journal	1/27/1999	B38
Contaminants at Katy Field pose no health risk, report says	The Providence Journal	3/24/1999	B39
Past exposure to soil at Middletown field no health threat	The Providence Journal	4/22/1999	B40

Appendix C

Navy Risk Communication Resources

Navy Risk Communication Resources

One primary conclusion from the Katy Field Case Study is that more Navy personnel need training in Risk Communication. The Naval School, Civil Engineering Corps Officers (CECOS) offers a three-day course to all Department of Defense Employees entitled, Health and Environmental Risk Communication Workshop. This course is designed to teach attendees how to have open discussion on environmental restoration issues, establish confidence in communicating key messages, develop effective media and public meeting techniques, improve verbal and non-verbal communication skills, and revitalize stakeholder dialogue. For more information about this course, including dates and locations for upcoming workshops, see the CECOS website located at www.cecos.navy.mil.

When site specific assistance is needed, the Navy Environmental Health Center, Environmental Programs Directorate is available to provide health and environmental risk communication support to Navy activities. We offer advice and assistance in preparing correspondence, practice evaluation of your messenger, preparation for a RAB meeting or other public meeting, assistance with community relations plans and profiling your community, and anticipating tough questions and developing answers. We have poster displays available on several of the most common chemicals or hazards present at Installation Restoration (IR) sites as well as general displays explaining such topics as the IR process and the National Environmental Policy Act (NEPA) process.

Given sufficient notice, we can develop site-specific poster displays for your activity's needs or produce special risk communication workshops (either internally or through paid consultants). At least one purpose of the site-specific workshops would be to bring all stakeholders together and work out specific communication issues. Depending on the complexity/degree of concern, more than one workshop may be necessary. All consultation services and poster displays in support of the Navy IR Program and BRAC program produced internally at NEHC are free of charge.

Please contact us at (757) 462-5548 with any questions or requests for assistance. In addition, you may visit our web site at www.nehc.med.navy.mil for additional information on the Navy Environmental Health Center and the services we provide.